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Uncertain Futures: what light can metaphor shed upon the conceptualisation of time

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1. Introduction

The detailed linguistic study of the language used to express time, events and modality has until recently largely focussed on the more widely spoken languages, with contributions from other languages all too frequently restricted to 'exotic' facts that appear superficially to contradict claims made about the better known languages. For example, it is sometimes said, with little detailed analysis in support, that speakers of language 'X' have no concept of the passage of time - a claim discussed and rejected by B. Comrie (1985:3), who notes that without a concept of time we could "not readily express the different stages in the life of a human". Similarly, it is frequently claimed that in language 'Y', the future is conceptualised as being behind, but with the question of what exactly the future is behind being left unsaid.

However, two recent in-depth studies (Núñez and Sweetser 2006; Sinha et al. 2011) have been made of previously little studied languages: Aymara and Amondawa. These seem to bear directly on these two issues, since, in different ways, the languages appear to express certain temporal notions in a manner very different from that of English. In this paper, I shall challenge the view that the conceptualisation of time in English as conveyed through language is as different from these languages as might be thought. However, a consequence of this is that what we think of as purely temporal descriptions might not be as they seem. I shall suggest that the means used in English to talk about time and events, particularly the metaphorical means that use space and movement to locate future events vis-à-vis the speaker, do not convey purely temporal information, but also reflect the speaker's relative knowledge of the events or times being described, with uncertain knowledge being located in relatively inaccessible or invisible locations.

In the first part of the paper, I shall largely concentrate on metaphorical means of conceptualising time and events, taking care to distinguish the two, which is not always done in metaphorical studies of time. Within this field, I shall narrow the study still further by dealing with the relation an observer at the deictic centre or 'now', who I shall refer to as Ego, has to different events and in particular to events that have not yet happened to him/her. I shall therefore start by introducing the type of metaphor I shall be dealing with. I

Alan Wallington

shall then briefly mention the recent studies that seem to present radically different ways from English of conceptualising time and events and argue that they are not, in fact, very different. I shall finish by discussing the relationship between time and events as conceptualised by metaphor and time and events as conceptualised more literally and put forward the suggestion that, here too, there may not be much of a difference.

2. Spatio-kinetic metaphors for time

It is an old observation that much of the language used to refer to motion through space and to describe spatial relations can also be used to talk about the more abstract concepts of time and the temporal relations that hold between events or that hold between events and Ego.

For example: *We are approaching, or coming up to, Christmas; Christmas can be upon us; Christmas can approach us. One can search back through the past. We can face the future, but we can't face Monday mornings. We can move events forward or backward. Events can whistle past and meetings can drag. People chase deadlines; yet be chased by deadlines. Traditions are handed down and events bubble up. Hogmanay follows after Christmas.* Although note that Hogmanay cannot felicitously be *ahead of or behind Christmas*, although *Christmas can be ahead of or behind us*.

To explain metaphors such as these Lakoff (1993) and Lakoff and Johnson (1980, 1999), building upon the work of Clark (1973) and Fillmore (1971), argue for a number of “elaborate systems of conceptual metaphor” which they claim structure the concept of time. In particular, and using the convention of Conceptual Metaphor Theory to abbreviate such elaborate systems, they argue for a system TIME PASSING IS MOTION, along with two special cases: TIME PASSING IS MOTION OF AN OBJECT and TIME PASSING IS MOTION OVER A LANDSCAPE, which are often referred to as MOVING TIME and MOVING EGO respectively. These systems both assume (Lakoff and Johnson, 1980:44) motion relative to an Ego, and “the future in front, the past behind.” Where they differ is in whether it is the future/past event which is being approached/left, or whether it is Ego doing the moving.

However, consider more closely the first and last examples from the examples given above, which I shall label as 1 and 2.

- (1) We are approaching Christmas.
- (2) Hogmanay follows after Christmas.

Moore (2000, 2006) has argued that the analysis of these sentences should not focus on what is moving; MOVING TIME and MOVING EGO. Instead, what is important is the temporal reference point (RP). And in examples such as these it is different. Thus, (1) assumes a deictic centre; it locates Christmas

with respect to Ego, or to the point of view of the people who are having the experience of this future event of Christmas. Under Moore's analysis, it uses an ego-based RP (henceforth, Ego-RP) encoding the future with respect to Ego. On the other hand, in (2), the timing of Hogmanay is neutral with regard to Ego's perspective. Instead, this event is located with respect to another event: Christmas. It can be analysed using an event-based RP (henceforth, Event-RP) and a separate conceptual metaphor: SEQUENCE IS RELATIVE POSITION ON A PATH ¹.

Consider now the question of what is behind what. In sentence (1), although the future event of Christmas is not explicitly stated as being in front of Ego, it is reasonable to assume that something being approached is in front. However, in sentence (2), the later event of Hogmanay follows after the earlier event of Christmas, as in a procession. From the perspective of Christmas, it can be construed as being behind it.

Although it might be argued that in sentence (2) there is a future event located behind an earlier event, Moore argues that what sentence (2) actually encodes is an earlier/later (rather than future/past) relation.

Lakoff (1993), Lakoff and Johnson (1999) subsume examples such as (2) under MOVING TIME on the assumption that the events are embedded in a stream of time-substance moving towards Ego from the front. However, as Moore notes, there is no reason to assume that this procession of events is not moving past Ego in a left-to-right or right-to-left direction.

I noted in the introduction that it has been claimed that there are languages in which the future is represented as being behind. But as just noted, sentence (2) could be so analysed. Building upon Moore's work on reference points, Núñez and Sweetser (2006) looked at various claims about the future being behind. Analysed from the perspective of an Ego-RP, languages which appear to use a position behind Ego to locate future events seem very rare and perhaps consist of just one, the Andean language Aymara. The Aymara do not use movement words to describe past or future events, but do make use a static spatial vocabulary, using nouns such as 'nayra' (eye, sight, front) and 'qhipa' (back) with adjectival and adverbial temporal meanings, allowing sentences such as the following (Núñez and Sweetser pp.415-416, examples 1, 2 and 4):

- (3) nayra mara ("last year")
eye/sight/front year
- (4) ancha nayra pachana ("a long time ago")
a lot eye/sight/front time in/on/at
- (5) qhipauru ("a future day")

¹ In section 3, I argue that the reference points do not consist solely of events.

Alan Wallington

back/behind day

Núñez and Sweetser (p.404) claim that:

It is the only case in the literature of a mapping where indeed future (not general posteriority) seems to be metaphorically IN BACK OF EGO.

In support of this analysis, Núñez and Sweetser note that speakers of Aymara produce backward gestures over their shoulders when talking about future events in contrast to speakers of English and related languages, who tend to produce forward gestures.

I also noted in the introduction that there are claims that, unlike the case with the common European languages, some languages have no concept of the passage of time. Again more careful study has been useful in responding to this claim. It is, for example, the case that approximately half of the world's languages do not have grammatical tense, Mandarin represents one such example. This doesn't mean, of course, that Mandarin speakers are unable to signal temporal reference. Indeed in Mandarin, as appears to be the case in English, there is a mapping between concepts of time passage and movement through space, although in Mandarin earlier events are often represented as being 'up' and later events 'down'². However, a more interesting example is provided by speakers of the Amazonian language Amondawa.

According to Sinha et al. (2011), the Amondawa language has no word for 'time' or for periods such as 'month' or 'year'. The Amondawa do not refer to their ages, but rather assume different names at different stages of their lives or as they achieve a different status within the community³. They do speak of different events and can talk of the earlier/later relation and of sequences of events. However, they have no words for time as something independent of events or as something in which events occur. Furthermore, they do not use spatial locations and motion verbs in Ego-RP temporal constructions although they do have a rich spatial vocabulary, which could, in principle, be used to talk of time. Interestingly, those who understand Portuguese seem to have no difficulty with the use of Portuguese spatial terms to describe time and events.

Sinha et al. hypothesise that the lack of a specific time terminology arises from the lack of 'time technology'. The Amondawa do not make use of a calendar system nor clocks nor other means of 'telling the time'. This may,

² Even in English, there is the metaphor of new events 'coming up' and 'traditions being handed down'.

³ C.f. B Comrie's comment in the Introduction.

in turn, be related to the paucity of their number system; they have numbers only up to five.

To conclude, English appears to differ radically from both Aymara and Amondawa. Unlike Amondawa, English appears to make use of an Ego-RP and spatio-kinetic language and unlike Aymara, which does use an Ego-RP and spatial language, English locates the future in front of Ego and the past behind. In what follows, I shall argue that although English does use spatio-kinetic language it does so not to think and talk about time as such, but rather to express the degree to which Ego has full or direct knowledge or awareness of an event and what Ego's plans for the event are. These are issues of modality rather than of time per se. I shall also argue that what might be labelled as future events, although often spatially located in English are typically not located directly in front of Ego and can be located behind Ego. I shall argue that this follows if what the spatio-kinetic language is being used for is to describe Ego's awareness of, and plans for, the events.

3. Events and time

Sinha et al (2011) noted the Amondawa's lack of 'time technology'; they made no use of clocks or calendars. English, of course has such a technology and this can give rise to an ambiguity concerning our use of terms such as 'Easter', Christmas', or 'the summer holidays'.

These terms represent both a date or time-period in a Calendrical system, i.e., a piece of time technology, and an event at which I expect certain activities to take place and which can involve some planning. I know that Christmas is on the 25th of December and I know that this will be an event, or bounded portion of time, at which I expect certain significant activities to take place. We are likely to spend Christmas with my mother, but where this will take place, I do not know. I know that we shall be buying presents for the children, but what I also don't know.

To talk of Christmas, then, is to use a metonym of a date or time for an event. Now, if I were to choose a random time, it is unlikely that there would be significant events planned for that time and for times involving a precise second or minute it is unlikely that there could be many significant events planned. Given this distinction, consider the following sentences involving the metaphorical use of space and time to convey the future.

- (6) The summer holidays are approaching.
- (7) ?? Two thirty seven is approaching.
- (8) ? Tuesday is approaching.

Sentence (7), if it expresses just a time, is unacceptable. However, if there is a planned event at 2:37 with important consequences for me - perhaps I am

Alan Wallington

due to catch a train at that time and the time now is almost two o'clock - then sentence (7) flips its status from unacceptable to acceptable. The clock time, however, remains the same in both cases. Compare this with temporal sequences, or what Moore terms event-based RPs, where 'Hogmanay follows Christmas' and '2:37 follows 2:36' are equally felicitous. I conclude from this that in time and movement metaphors involving an Ego, it is the event rather than the time per se that is being treated metaphorically; in particular it is the potential consequences that the event may have for us.

4. The location of events

With this in mind, I shall return to the issue of the location of future events and pose the question of where are future events typically located in English discourse. Although they differ on details, Lakoff (1993), Lakoff and Johnson (1980, 1999), Moore (2000, 2006), Núñez and Sweetser (2006) and many others all seem to agree that in English the future is in front of Ego and that examples such as the following represent typical examples: "*Easter is in front of us*"; "*Christmas is in front of us*"; "*the holidays lie ahead*". Lakoff and Johnson also assume that in examples such as "*Christmas is coming*" Christmas is coming to Ego from a position in front of him/her, although there seems no reason to assume this from the sentences themselves⁴.

However, there seems to be little empirical research on how typical such locations are when describing future events. Consequently, I conducted a pilot study to look for examples. Using the British National Corpus (BNC), I searched for phrases in which 'Easter' or 'Christmas' *is* or *lies ahead*. The sentences were free to continue or start in a number of ways. No examples were found. I therefore switched to using Google™ and added a further event, 'holidays'. The following results were obtained:

Easter is ahead ...	30 hits.
Easter lies ahead ...	23 hits.
Christmas is ahead ...	47 hits.
Christmas lies ahead ...	46 hits.
holidays are ahead ...	76 hits
holidays lie ahead ...	24 hits

Note that the results are broadly of the same order of magnitude.

A further search was then conducted for a different location. This time the phrase 'around the corner' was used and the number of hits was substantially higher, by roughly a factor of 10.

⁴ Moore (2006) also argues that this is not necessarily the case.

Uncertain Futures

Easter is around the corner	607 hits.
Christmas is around the corner	790 hits.
holidays are around the corner	739 hits.

In conducting the search, the phrases were put in quotation marks, so that the exact wording or phrase was being searched for. When the results were returned, I ignored the headline count figures, such as 'About 1,550,000 results.' Instead I checked through successive pages of results until the last results page was reached. This page displays a note such as the following:

In order to show you the most relevant results, we have omitted some entries very similar to the 790 already displayed.

It is of course possible that the figures arrived at were inflated by virtue of the same song lyric, article and so on containing the words being referenced from a large number of different sites. However, a cursory examination suggested that this was not the case. The broad similarity of the figures and the similar differences in order of magnitude from the earlier phrases would seem to support this. It is also well-known that counts vary from day to day and the exercise has been repeated on a number of occasions, with different counts being given. However, the difference in magnitude between the 'round the corner' results and the 'ahead' results has stayed similar.

It would seem then events such as Christmas are typically not viewed as being directly ahead of us, at least not in the line of vision. They may be thought to be in front of us, but round the corner, where their shape or details cannot be seen.

What I shall show now is that there are sentence containing future events which flatly contradict the view that in English the future must be conceptualised as being in front of Ego. Consider the following sentences, also found through an internet search:

- (9) Where are you both regarding the digital movement coming up behind us? Joey: Digital is here, it's not behind us. [Laughs] Josh: Yeah, it's not behind us ⁵.
- (10) Due to the fact that Christmas is coming up behind us I decided that this would be a great start for all those resellers ⁶!
- (11) the myriad of ways we can prevent the heart attack or stroke that is always lurking over our shoulder ⁷.
- (12) 1st semester is just about done, and 2nd semester is creeping up behind us. I think I'm ready to move on ⁸.

⁵ <http://waringis.com/archives17/>

⁶ <http://www.webhostingtalk.com/archive/index.php/t-28863.html>

⁷ www.abigon.com/

Alan Wallington

In all these examples, a future event or a possible future event is behind Ego. Note in particular sentence (11) and (12). Future events are often described as 'lurking behind' or 'creeping up behind' especially if they are thought to be unpleasant.

Consider next the case where Ego is approaching an event. Such instances are usually claimed to involve Ego moving forward. However, the following show this is not always so.

(13) Pundits and everyday Joes sounded all sorts of Cassandra cries that we were walking backwards into a socialist state ⁹.

(14) All this was intended to communicate the message that our people, our country and our movement are walking backwards into a new Age of Darkness ¹⁰!

In sentence (15), it is not stated whether Ego is walking forward or not, but importantly he/she cannot see where he/she is going. Finally note sentence (16), where Christmas is 'far off' but in an unspecified direction.

(15) If we don't do it now then we are simply blindly walking into an ever more totalitarian controlled, socially and economically stratified,... ¹¹

(16) But Christmas is still far off, and what's on the mind of most Canadians is ... ¹²

So how should these results be analysed? As already noted, a distinction can be made between knowing of a date or time and knowing what your plans are, or what plans you could make, for that date or time; how the event will impact on you.

Of course, with some events, one's knowledge of what will happen and how the event will relate to other events is far from certain. For example, at the time of writing, my knowledge of what I shall be doing over Easter is very uncertain; I don't even know the exact date. Indeed by their very nature, one can never have completely certain knowledge of events that have not yet happened. Thus, the examples of an event being 'round the corner' and the examples 9 to 16 all seem to involve a future event that Ego is aware of but does not know much about, has not made many plans for, or does not have certain knowledge of. On the other hand, in examples such as "*Christmas is ahead*" or "*Christmas is coming*", the uncertainty about the nature of Christmas seems to be less of an issue. How then might these metaphors be analysed?

⁸ blogs.aol.com/susie320/ThisismeNow

⁹ www.care2.com/.../socialist-propaganda-to-benefit-librarians-and-the-libraries-that-recruit-them.html

¹⁰ www.southafricanemb.se/arkiv/presletarc133.htm

¹¹ www.guardian.co.uk/business/.../executive-pay-keeps-rising

¹² theгаuntlet.ca/search.php?Start=4170&Quantity...

Uncertain Futures

I shall assume two common metaphors for knowledge. MENTAL ANALYSIS IS MANIPULATION (Wallington 2010; Jäkel, 1995) and KNOWING AS SEEING¹³. In Wallington (2010), I argued that ideas are often reified as physical objects and the use of locations around Ego expresses the degree to which Ego has knowledge of an idea and interacts with it.

In the examples under discussion, I have suggested that the metaphors concern Ego's knowledge of and about an event. Therefore, I shall assume that in these cases, it is events that are reified as physical objects. What is known about physical objects existing in physical space is that they may be movable. They can potentially be seen and/or manipulated by Ego. I also assume that the location of Ego corresponds to 'now'. All this being the case, then the most direct way in which the event-objects can be manipulated and so known is if they are actually co-located with Ego at 'now' rather than some distance away. If they are approaching Ego, then there is a high degree of likelihood that they will at some point be manipulated by Ego, but certain knowledge of the event-object cannot be known until the object is co-located with Ego at 'now'.

Objects around a corner from Ego or behind Ego cannot be seen, but may nonetheless be known to exist in some form. One can perhaps anticipate aspects of them, but cannot be certain about every aspect. Similar points apply if one is walking backwards or blindly towards an event-object. On the other hand, if one has full view of an event-object, if one is 'face-to-face with the future', then I would argue that the issue of one's epistemic detachment from the event is not something that is expected to be inferred from the use of the metaphor. However if an event is stated to be 'far off' as in sentence (16), then one can infer that one does not have direct mental awareness of the event.

Finally, events/objects that are 'coming up behind' Ego, especially if they are creeping up, may well suggest an emotional state of fear or worry in the person behind whom the event is located.

Between them, I would claim that the use of metaphors for knowledge, the reification of events as movable physical objects plus the general tendency for metaphors to be extended by allowing information concerning the degree to which something holds, information concerning its certainty and/or information about the emotional state induced by the arrival of an event, can account for the seeming use of a landscape to locate future events.

If we return to the Aymara, then we can see that the difference with English is not an absolute distinction in how the future is conceptualised. Rather, it is more one of the degree that evidentiality plays in the language

¹³ In Wallington (2010), these are both seen as special cases of a more general metaphor in which knowing or learning about something through one's senses metaphorically stands in for knowing or learning about something in general.

Alan Wallington

and culture; Aymara marks evidentiality grammatically. Indeed Núñez and Sweetser suggest that the Aymara may conceptualise the future as behind them because of the importance they place on the evidence for knowledge

Turning to the differences between Amondawa and English, it would seem that English does not map from times such as 2:37 or Friday to locations around Ego. However, where English differs from Amondawa is in the option in English of mapping from locations around Ego to Ego's knowledge of and about time-stamped events¹⁴. As examples (9) to (16) and the 'round the corner' cases show, it seems future events can be located in many different locations around Ego, reflecting Ego's ability to mentally interact with the events.

5. Non-metaphorical futures

My discussion so far has assumed a cognitive and conceptual approach to meaning, in line with most work on the metaphorical representation of time. But it is not just Cognitive Linguistics that takes such an approach to meaning. There is an enormous literature on the linguistic encoding of temporal reference that concentrates on the use of tense, aspect, modality and the use of temporal adverbs and other expressions. Thus, as well as sentence (6) repeated below, almost exactly the same meaning can be expressed by sentence (17).

(6) The summer holidays are approaching.

(17) It will soon be the summer holidays.

Within this tradition, there are many who also view meaning as reflecting conceptual representations. For example, Jaszczolt (2009:33) states:

The way in which we represent time in semantic theory will then have to directly reflect our conclusion on how humans represent time in thought: semantic representation will follow mental representation ...

However, if sentences (6) and (17) mean the same, then we would seem to have a problem. I have argued that the metaphorical sentence (6) should be analysed in terms of Ego's awareness of, and plans for, the event of the summer holidays. However, sentence (17) has traditionally been analysed as being in the future tense and referring to a future event of summer holidays.

However, the view that the modal 'will' represents the future tense can be challenged. For example, Huddleston and Pullum (2001:52) state:

¹⁴ More research is needed to determine whether the default, unmarked case in English is to locate future events broadly in front of Ego, rather than behind, in contrast to Aymara where the future seems to be behind Ego.

Uncertain Futures

“English has no future tense: will and shall belong grammatically with must, may, and can, and are modal auxiliaries, not tense auxiliaries”. See also Huddleston and Pullum (2001:208-12) and Huddleston (1995). Similarly, Allan (2001:358) writes: “Although often spoken of as a tense marker, English ‘will’ and its past tense ‘would’ are primarily modals.” Sarkar (1998:112) concludes: “Will equals the modality of prediction plus PRES tense morphology.”

As the following examples show, ‘will’ is not required when talking about the future. A range of verbs including modals such as ‘may’, auxiliaries such as ‘be’, and main verbs such as ‘come’ and ‘go’ can be used. Various adjectives such as ‘bound’, ‘certain’ or ‘about’ can also be used with infinitival complements. Moreover, the present tense can express a future time.

- (18a) A train will come (at nine).
- (18b) A train comes at nine.
- (18c) A train is to come at nine.
- (18d) A train is coming at nine.
- (18e) A train is going to come (at nine).
- (18f) A train is bound to come (at nine).
- (18g) A train is certain to come (at nine).
- (18h) A train is about to come.
- (18i) A train may come (at nine).

Amongst all these instances of future reference, there seems to be no reason to privilege the modal verb ‘will’.

Moreover, ‘will’ is not just used to convey the future, or the apparent future. It can also be used to convey a wide range of meanings, including volition, obligation, inclination, habituation, tendency, inference, and prediction. For example, *X will P* can mean that X is determined to do, or wills, P. *You will eat your dinner* can mean that you are obliged to eat your dinner and not just that you will eat your dinner at some future time. *X will P* can mean that ‘X’ has a regular habit of doing P –he will leave it to the last minute, as usual. It can mean that X can be inferred to be doing P right now – he will be at a friend’s–, or is predicted to do P: *I expect that he will spend the night at a friend’s*.

Since ‘will’ in general has a meaning that conveys different types of modality and since ‘will’ is not required for conveying the future, then it seems reasonable to assume that when ‘will’ is conveying what appears to be the future, what is actually being conveyed is a type of modality and that the relation between Ego and future events is a type of modality. But if this is the case with ‘will’, might it not be also the case when what appears to be the

Alan Wallington

future, and not just a future tense, is being conveyed in the absence of ‘will’. Indeed, the different ways of expressing the apparent future can be argued to differ with respect to certainty, with the present tense forms such as (18b) seeming to express a higher degree of certainty than (18a) which uses ‘will’.

Jaszczolt (2009:35) argues:

Just as the *semantic category of temporality* is not basic and can be traced back, both diachronically and synchronically (i.e. with respect to semantic properties) to the category of modality, so the *conceptual category of time* can be shown to be none other but a conceptual category of modal detachment.

In short, “The concept of time supervenes on a more basic concept of modal possibility, epistemic detachment.”

A similar approach to the semantics of tense is advocated by Steedman (2005), who argues that “the semantics of tense and aspect is profoundly shaped by concerns with goals, actions and consequences.” He notes (p.5):

The first thing to observe about the temporal ontology implicit in natural language is that it is not purely temporal. To take a simple example, the English perfect, when predicated of an event like losing a watch, says that some contextually retrievable consequences of the event in question hold at the time under discussion.

Thus the following is odd: “I have lost my watch (?? but I have found it again)”. And Ludlow (1999:163) argues that tense and temporal reference is most likely: “a mixture of modality and evidentiality.”

To conclude then, the evidence from the investigation into metaphorical means of conveying Ego’s possible relations with events that have not yet happened seems to concur with recent investigations into the more literal means of conveying the relation. That is, the relation is one of epistemic detachment, of modality understood as predictability or potentiality. It is a relation shaped by concerns with goals, actions and consequence. There is no conflict between the two.

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Uncertain Futures

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